

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image sensing and printing digital camera device ~~which comprises~~comprising:
a housing;
an area image sensor positioned on the housing for sensing a viewed image to be printed on media and for generating pixel data representing the viewed image;
a printing mechanism that is arranged on the housing,~~the printing mechanism defining a media feed path and comprising~~
—— a ~~printhead assembly that includes a pagewidth printhead having at least one printhead chip that spans the media feed path; and~~
—— a ~~feed mechanism for feeding media along the media feed path so that the printhead can carry out a printing operation on the media; and~~
a ~~processor~~one-chip microcontroller that is positioned in the housing, the ~~processor~~one-chip microcontroller ~~comprising processing circuitry~~integrating on the one chip a VLIW processor, an image sensor interface connected to the ~~processing circuitry~~VLIW processor for receiving pixel data from the image sensor, converting the pixel data into an internal format and writing the converted pixel data to the processing circuitry, the processing circuitry being configured to convert the pixel data to print image data; and a printhead interface connected to the ~~processing circuitry~~VLIW processor for receiving the print image data from the ~~processing circuitry~~VLIW processor and for providing signals representing the print image data to the printhead so that the printhead can carry out said printing operation to generate a printed representation of said viewed image.
2. (Original) A device as claimed in claim 1, in which the area image sensor is one of a charge coupled device and an active pixel sensor.
3. (Original) A device as claimed in claim 1, in which the printing mechanism includes an ink distribution assembly that is mounted on the printhead assembly to distribute ink to the printhead chips.

4. (Cancelled)

5. (Currently Amended) A device as claimed in claim 1, in which the ~~processor one-chip~~ microcontroller is configured to be programmable with any of a number of image processing programs so that the ~~processor one-chip microcontroller~~ can carry out image processing operations on the pixel data in accordance with a selected program loaded on the ~~processor one-chip microcontroller~~.

6. (Currently Amended) A device as claimed in claim 5, which includes a reader for reading said any of a number of image processing programs stored on a data storage device and a reader interface for writing the program to the ~~processor one-chip microcontroller~~.

7. (Currently Amended) A device as claimed in claim 6, in which the reader is an optical reader for reading a two-dimensional pattern printed on a planar element, the two-dimensional pattern representing a program in an image processing language, the optical reader being configured to generate program data and the reader interface being configured to receive the program data and to write the program data, in an internal format, to the ~~processor one-chip microcontroller~~.

8. (Currently Amended) A device as claimed in claim 7, in which the ~~processor one-chip microcontroller~~ includes a memory device, the ~~processing circuitry~~ VLIW processor being configured to write the program data in the internal format to the memory device, the ~~processor VLIW processor further including a central processing unit which runs running~~ the program from the memory device to define a software algorithm ~~in terms of which the central processing unit by which~~ addresses registers in the printhead interface are addressed to apply a desired effect to the print image data.